

CLAIMS

1. Fixing support assembly comprising:

- a supporting element comprising a first part (10) and a second part (20), which are essentially planar and parallel, at least one of the first (10) or second (20) parts comprising at least one retaining member (21,21');
- a fixing element (30) comprising a nut (31) equipped with a stop (32).

2. Fixing support assembly according to claim 1, characterized in that at least one of the first (10) or second (20) parts of the supporting element comprises at least one fixing clip (12).

3. Fixing support assembly according to claim 1 or 2, characterized in that one of the first (10) or second (20) parts of the supporting element comprises a housing (11) designed to receive the fixing element (30).

4. Fixing support assembly according to claim 3, characterized in that the stop (32) of the fixing element (30) is designed to remain captive in said housing (11).

5. Support assembly according to one of claims 1 to 4, characterized in that the supporting element (10, 20) has an opening (15) passing through it situated essentially in the centre thereof.

6. Support assembly according to one of claims 1 to 5, characterized in that the supporting element (10, 20) is made from moulded plastic.

7. Vehicle opening frame comprising:

- a dry zone (A);
- a wet zone (B) separated from the dry zone by a supporting panel (100);
- a fixing support assembly according to one of claims 1 to 6, fixed to the supporting panel (100), the first part (10) of the supporting element being arranged in the wet zone (B) and the second part (20) of the supporting element being arranged in the dry zone (A).

8. Vehicle opening frame according to claim 7, characterized in that it comprises a window regulator or door actuating motor (60) fixed to the second part (20) of the supporting element.

9. Vehicle opening frame according to claim 8, characterized in that the motor (60) is retained by at least one retaining member (21, 21') arranged on the second part (20) of the supporting element.

5 10. Vehicle opening frame according to claim 8 or 9, characterized in that the motor (60) is fixed to the supporting panel (100) by means of a single screw (40) cooperating with the fixing element (30).

10 11. Vehicle opening frame according to claim 10, characterized in that the motor (60) comprises a casing (50) comprising a bore (51, 52, 53) designed to receive the screw (40) and a part of the fixing element (30).

15 12. Vehicle opening frame according to claim 11, characterized in that the bore has a first section (51) having a first diameter (d_1) and a second section (52) having a second diameter (d_2) greater than said first diameter (d_1), said second section (52) of the bore being designed to receive at least one part of the nut (31) of the fixing element (30).

20 13. Vehicle opening frame according to claim 11 or 12, characterized in that the bore also has an alignment section (53) adjacent to the second section (52).

25 14. Method of mounting a window regulator or a frame actuating motor (60) on a supporting panel (100) of a vehicle opening frame, said panel (100) separating a dry zone (A) from a wet zone (B), the method comprising steps consisting of:

- fixing a fixing support assembly according to one of claims 1 to 6 on the supporting panel (100), the first part (10) of the supporting element being arranged in the wet zone (B) and the second part (20) of the supporting element being arranged in the dry zone (A);
- holding the motor (60) on the second part (20) of the supporting element of said fixing support assembly;
- adjusting the position of the motor (60) rotatably about a drive axis (70);
- fixing the motor (60) to said supporting panel (100) in a rotation stop position about said drive axis (70) by means of the fixing element (30) of said fixing support assembly.

15. Method according to claim 14, characterized in that the step of fixing the motor (60) to the supporting panel (100) is carried out by means of a screw (40) designed to draw the nut (31) of the fixing element (30) into a bore (52) provided in a casing (50) of the motor (60).